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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,844	01/23/2002	Takeshi Kai	KPO-108-A	7883
21828	7590	03/02/2006	EXAMINER	
CARRIER BLACKMAN AND ASSOCIATES			CULBRETH, ERIC D	
24101 NOVI ROAD			ART UNIT	
SUITE 100			PAPER NUMBER	
NOVI, MI 48375			3616	

DATE MAILED: 03/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/055,844	<b>Applicant(s)</b> KAI ET AL.	
	<b>Examiner</b> Eric Culbreth	<b>Art Unit</b> 3616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 and 20-24 is/are allowed.
- 6) ☒ Claim(s) 13-19 and 25-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/06/05</u> . | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 contradicts claim 13. Claim 13 now recites said at least one partition/predetermined portion extending in a linear expansion direction. However, when claim 16 recites that the predetermined portion (forming the partition) is a circle or semicircle, this contradicts claim 13 (the circle and semicircle in the embodiments shown in the figures do not extend in the linear expansion direction).

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 13-19 and 25-29 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (US Patent 5,785,350, of record) in view of Japanese Patent 10-175497 (of record, cited by applicant).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inoue et al, who teaches inflator 11 mounted in the side portion of a vehicle seat generating gas in response to a detection signal for a folded

airbag expanding linearly forward and upward in Figure 1 from the side portion of a seat, as well as tethers or partitions 29, 30 as broadly recited determining the shape of the air bag during expansion so as to facilitate a high speed expansion to a final shape as broadly and functionally recited, to include an acceleration sensor generating a signal when a lateral acceleration is detected as taught by Japanese '497 (page 3, paragraph [0020] and page 5, paragraph [0032] of the English translation submitted with the reference) in order to conventionally provide the electric signal of Inoue et al at column 6, lines 50-55 (claims 13 and 25). Regarding the new limitations added to claims 13 and 25 that the partition is in a substantially central portion of the airbag extending substantially in the linear expansion direction, Inoue et al, the primary reference, teaches partition 30 in a central region of the airbag at least (a central portion is so broad that Inoue et al's other partitions 29 are also in a central portion) and in the combination Japanese '497 teaches partitions 40 in Figure 6 that are in a central region of the airbag and extend in the direction of linear expansion (i.e., they are elongated in the upward direction in which the bag ultimately expands, and this would be a teaching in the combination to extend or elongate the partitions in the direction the bag expands). Inoue et al teaches sewing two panels 27, 28 together in Figure 5A-1, where the bag would extend beside an arm and shoulder as functionally recited (claims 14 and 25). Regarding claims 15-16 and 26, in the combination Japanese '497 teaches partitions 40 formed by sewing predetermined portions of the side panels forming circles together as indefinitely recited, and it would have been obvious to form Inoue et al's tethers of portions sewn together as taught by Japanese '497 in order to eliminate parts and

materials by making the partitions with sewn together side portions instead of separate cloth strips. Regarding claim 19, Inoue et al's tethers or partitions determine an expansion direction of the air bag as functionally recited (by forcing the bag to expand less in the transverse direction and more in the elongated direction) and the expansion direction is opposed to where the gas enters the bag. In the combination (claims 17-18 and 27-28), Inoue et al, the primary reference, teaches tethers 29, 30 that are linear and shaped differently from each other (tether 30 is wider than tethers 29), and this would be a teaching in the combination to make the sewn together portions linear and of different shape. Regarding claim 29, Inoue et al's tethers 29 are nonsymmetrical with tether 30 (i.e., they are offset laterally), and this would be a teaching in the combination to make Japanese '497's sewn together portions nonsymmetrical.

5. Claims 13, 25 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura et al (US Patent 5,893,579, of record) in view of Japanese '497.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kimura et al, who teaches an air bag in Figures 1-2 that is inflated by the illustrated inflator to expand from the side of a seat in a generally forward and upward direction, and has a medial portion greater in width than the end portion next to the inflator and the end portion at the end distal from the inflator (where the bag has a width smaller than the medial portion due to the curvature at the edges), to include side panels making the bag and elongated central partitions joining the sides

such as Japanese '497's partitions 40 in Drawing 6, and a lateral acceleration sensor such as taught by Japanese '497 at paragraphs [0020] and [0032] of the provided English translation, in order to conventionally form the bag of panels and conventionally detect side impact for a side air bag and to control the shape of the bag with the partitions or tethers so the bag will not expand undesirably in a transverse direction.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 13 and 25 regarding the central extending partition(s) have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's arguments filed 12/16/05 have been fully considered but they are not persuasive.

The claim language applicant refers to on page 11 of the remarks ("partitions...facilitat[ing] high speed expansion of the airbag to a final shape...") is so broad that the partitions of the combination meet the limitation (the partitions facilitate some "high speed" expansion (the actual claim language in claims 13 and 25 is "a high speed expansion") to a final shape in that the bag reaches its final shape sooner because it is restricted from expanding more transversely by the partitions or tethers). Applicant reminded that in patent examination, claim language is broadest reasonable interpretation (see MPEP 2111). In view of the new rejection, in which Japanese 497's elongated partitions 40 in Drawing 6 are included in the combination, applicant's

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remarks on page 11 of the 12/16/05 paper regarding Inoue et al's perpendicular tethers are now moot. At the end of page 11 of the remarks and on page 12 of the remarks, the applicant states Inoue discloses that the tethers generally tend to interfere with expansion of the airbag, but does not cite a specific text from Inoue et al. At any rate, in the combination Japanese '497's would not appear to interfere with airbag expansion (i.e., sewing the outer panels together would not interfere with expansion, nor would it prevent cactus folds from being used), and the claim language does not exclude "cactus folds" such as Inoue et al's (i.e., sewing the panels together would not "destroy" Inoue et al's invention). In the next to last paragraph on page 11 of the 12/16/05 remarks, the applicant asserts that neither Inoue et al or Japanese '497 teach S-shaped tethers/limit parts (claims 17 and 27) nor different shape (claims 18 and 28). However, claims 17 and 27 do not require an S-shape, but rather recite this as an alternative, and as noted above Inoue et al, the primary reference, teaches tether 30 wider than tethers 29. This would be a different shape in keeping with the broadest reasonable interpretation (MPEP 2111). Finally, as noted above, applicant's remarks regarding the combination of Kimura et al and Japanese '497 are moot in view of the new grounds of rejection.

***Allowable Subject Matter***

8. Claims 1-12 and 20-24 are allowed.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric Culbreth  
Primary Examiner  
Art Unit 3616

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